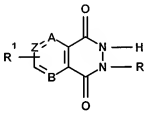
AMENDMENTS TO THE CLAIMS

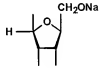
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-70. (Cancelled)

71. (Currently amended) A method for ~~treatment of reversible abnormal changes in pH~~ normalizing an acid-base balance of nucleated and non-nucleated cells, said method comprising administering to a subject in need of such treatment a pharmaceutically-effective amount of a biologically-active compound in order to normalize the endocellular pH to the physiologically acceptable levels, wherein said biologically-active compound has a general structural formula:





where R is selected from the group consisting of , Li, Na, and K;

R^1 is selected from the group consisting of -H, $-NH_2$, -Br, -Cl, -OH, and -COOH;

B is selected from the group consisting of -N=, -CH=, and $-CR^1=$;

Z is selected from the group consisting of -CH=, $-CR^1=$, and -N=; and

A is selected from the group consisting of -N=, -CH=, and $-CR^1=$;

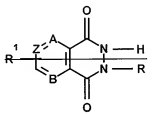
wherein when A is -N=, then B is -N= and Z is $-CR^1=$, and wherein when A is $-CR^1=$,

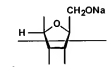
then B is -CH= and Z is -CH=,

and pharmacologically acceptable salts thereof.

72-96. (Cancelled)

97. (Currently amended) [[A]] The method as claimed in Claim 71, wherein the normalization of the acid-base balance decreases ~~for treatment of increased~~ aggregation of thrombocytes ~~and erythrocytes, said method comprising administering to a subject in need of such treatment a pharmaceutically effective amount of a biologically active compound having a general structural formula:~~





~~where R is selected from the group consisting of~~ ~~, Li, Na, and K,~~

~~R^+ is selected from the group consisting of H, NH_2, Br, Cl, OH, and COOH;~~

~~B is selected from the group consisting of N=, CH= and CR^1=;~~

~~Z is selected from the group consisting of CR^1=, CH= and N=; and~~

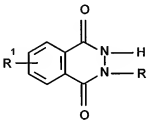
~~A is selected from the group consisting of N-, CH= and CR^1=;~~

~~wherein when A is N=, then B is N= and Z is CR^1=, and wherein when A is CR^1=; then B is CH= and Z is CH=,~~

~~and pharmacologically acceptable salts thereof.~~

98.-102 (Cancelled)

103. (Original) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95,~~ 97~~, 99 or 101~~, wherein the cyclic bioisostere is a derivative of benzo[d]-3H-pyridazine-l,4-dione, having a general formula



where R selected from the group consisting of the atom of Li, Na, K, and 

; and R^1 is selected from the group consisting of -H, -NH_2, -Cl, OH, and -COOH.

104. (Currently amended) The method as claimed in Claim 103 ~~any of Claims 71, 86, 90, 93, 95, 97, 99, or 101~~, wherein the biologically-active compound is selected from the group consisting of:

sodium salt of 2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 5-amino-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 6-amino-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 5-chlorine-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

disodium salt of 5-hydroxy-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

lithium salt of 5-amino-benzo[d]-3H-pyridazine-1,4-dione,

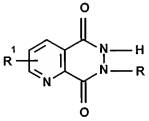
sodium salt of 5-amino-benzo[d]-3H-pyridazine-1,4-dione,

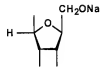
potassium salt of 6-amino-benzo[d]-3H-pyridazine-1,4-dione,

disodium salt of 5-hydroxy-benzo[d]-3H-pyridazine-1,4-dione, and

disodium salt of 6-carboxy-benzo[d]-3H-pyridazine-1,4-dione.

105. (Withdrawn- currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95, 97, 99 or 101~~, wherein the cyclic bioisostere is a derivative of pyrido[2,3-d]-6H-pyridazine-5,8-dione, having a general formula





where R is selected from the group consisting of the atom of Li, Na, K, and ; and R^1 is selected from the group consisting of -H, $-NH_2$, -Br, -OH, and -COOH.

106. (Currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95, 97, 99 or 101~~, wherein the biologically-active compound is selected from the group consisting of:

sodium salt of 7-(β-B-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione,

sodium salt of 4-amino-7-(β-B-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,

sodium salt of 3-bromine-7-(β-D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione,

disodium salt of 4-hydroxy-7-(β-D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,

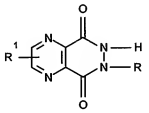
disodium salt of 3-carboxy-7-(β-D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,

lithium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione,

sodium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione , and

potassium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione.

107. (Withdrawn- currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95,~~ 97~~, 99 or 101~~, wherein the cyclic bioisostere is a derivative of pyrazine[2,3-d]-6H-pyridazine-5,8-dione, having a general formula



where R is selected from the group consisting of the atom of Li, Na, K, and  ; and R^1 is selected from the group consisting of -H, $-NH_2$, -Br, -OH, and -COOH.

108. (Currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95,~~ 97~~, 99 or 101~~, wherein the biologically-active compound is selected from the group consisting of:

sodium salt of 7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

sodium salt of 2-amino-7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

sodium salt of 3-amino-7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

sodium salt of 3-bromine-7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

disodium salt of 2-hydroxy-7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

disodium salt of 2-carboxy-7-(β-D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

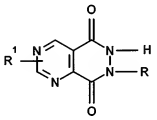
lithium salt of pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

sodium salt of pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

potassium salt of 3-bromine-pyrazine[2,3-d]-6H- pyridazine-5,8-dione , and

sodium salt of 2-amino-pyrazine[2,3-d]-6H-pyridazine-5,8-dione.

109. (Withdrawn- currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95,~~ 97~~, 99 or 101~~, wherein the cyclic bioisostere is a derivative of pyrimido[4,5-d]-6H-pyrodazine-5,8-dione, having a general formula



where R is selected from the group consisting of the atom of Li, Na, K, and ; and R^1 is selected from the group consisting of -H, $-NH_2$, -Br, -OH, and -COOH .

110. (Currently amended) The method as claimed in any of Claims 71 or ~~, 86, 90, 93, 95,~~ 97~~, 99 or 101~~, wherein the biologically-active compound is selected from the group consisting of:

sodium salt of 7-(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione,

sodium salt of 2-amino-7-(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione,

sodium salt of 4-amino-7(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

sodium salt of 2-bromine-7-(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

sodium salt of 4-hydroxy-7-(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

sodium salt of 4-carboxy-7-(β-D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

lithium salt of pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

sodium salt of 2-amino-pyrimido[4,5-d]-6H-pyridazine-5,8-dione , and

potassium salt of 4-bromine-pyrimido[4,5-d]-6H-pyridazine-5,8-dione.